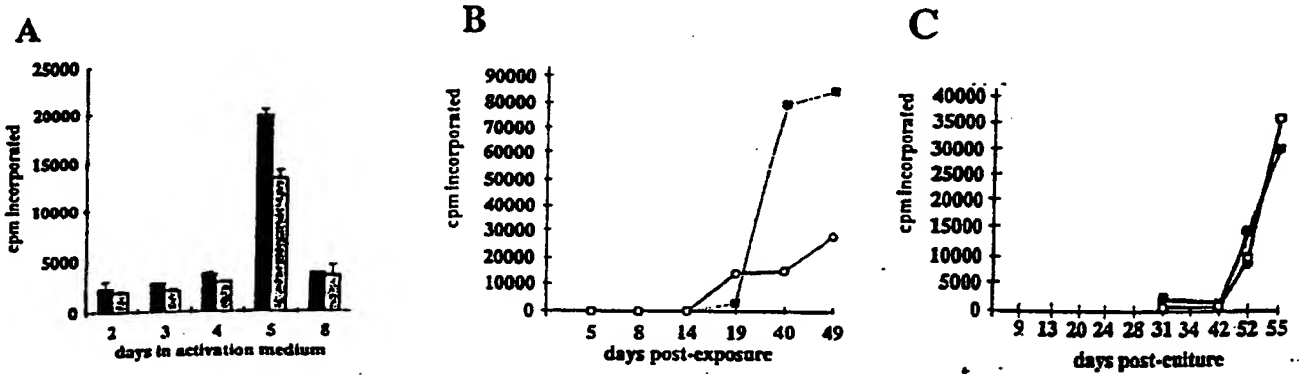


Fig 1

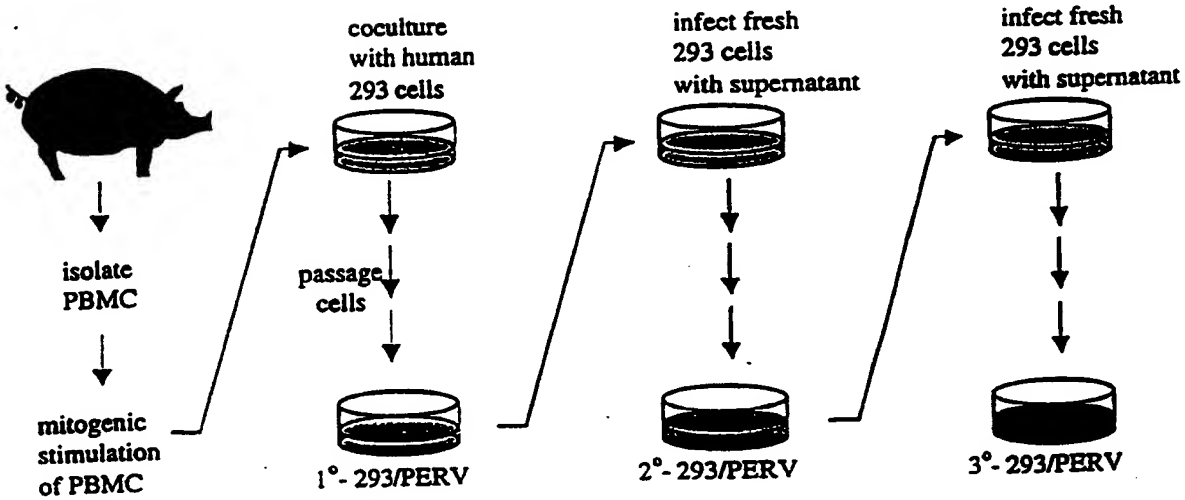
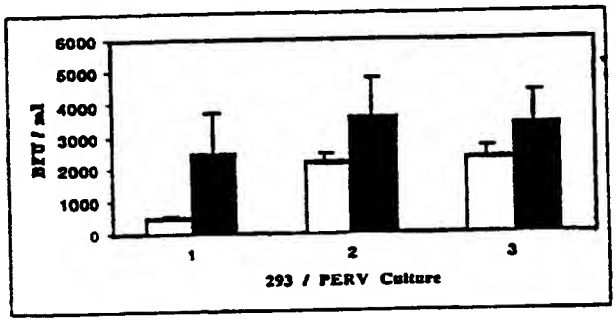


Fig 2



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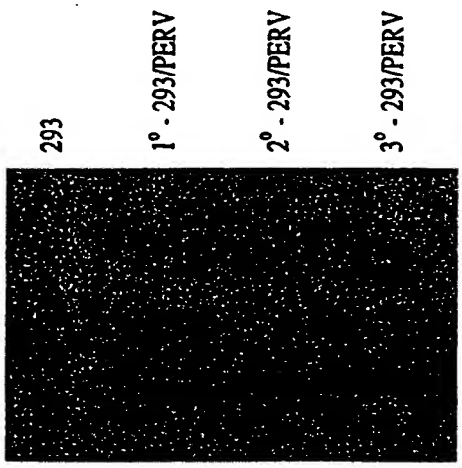
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1° - 293/PERV
2° - 293/PERV
3° - 293/PERV
Relative Copy #
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1.00
2.14
2.24

Fig 4

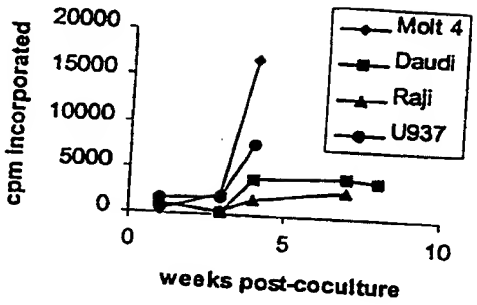
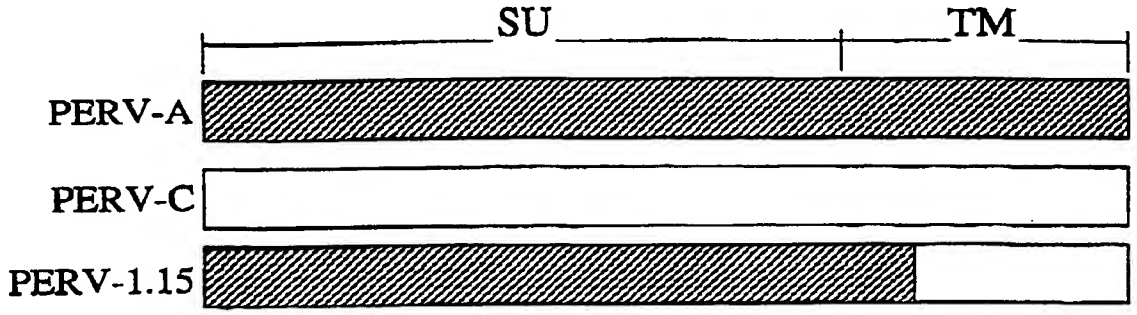

20000
15000
10000
5000
0
cpm incorporated
0
5
10
weeks post-coculture
Molt 4
Daudi
Raji
U937

Fig 5

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PERV-C    .....N.... .......... .......... ........S. T..M.IG..L 50

PERV-1.15 NSHKPLSLTW LLTDSGTGIN INSTQGEAPL GTWWPELYVC LRSVIPGLND 100
PERV-A    .......... .......... .......... .......... .......... 100
PERV-C    .......... .I........ ..N..... ......D..... ......S.TS 100

PERV-1.15 QATPPDVLRA YGFYVCPGPP NNEEYCGNPQ DFFCKQWSCV TSNDGNWKWP 150
PERV-A    .......... .......... .......... .........I .......... 150
PERV-C    _____.I.H. H......... ..GKH....R ........N. .....Y.... 147

PERV-1.15 VSQQDRVSYS PVNNPTSYNQ FNYGHGRWKD WQQRVQKDVR NKQISCHSLD 200
PERV-A    .......... .......... .......... .......... .......... 200
PERV-C    T.......F. Y..TY..SG- ...-------- _____LTWI. TGSPK.SPS. 185

PERV-1.15 LDYLKISFTE KGKQENIQKW VNGMSWGIVY YRGSGRKKGS VLTIRLRIET 250
PERV-A    .......... .......... ...I...... .G........ .......... 250
PERV-C    .......... .......L.. .......M.. .G...KQP.. I.....K.N_ 234

PERV-1.15 QMEPPVAIGP NKGLAEQGPP IQEQRPSPNP SDYNTTSGSV PTEPNITIKT 300
PERV-A    .......... .......... .......... .......... .......... 300
PERV-C    .L...M.... .TV.TG.R.. T._____G.G. ._S.I....D ...S.S.T.M 279

PERV-1.15 GAKLFNLIQG AFQALNSTTF EATSSCWLCL ASGPPYYEGM ARGGKFNVTK 350
PERV-A    .....S.... .......... .......... .......... .......... 350
PERV-C    .....S.... .......... .......... .......... ..R....... 329

PERV-1.15 EHRDQCTWGS QNKLTLTEVS GKGTCIGMVP PSHQHLCNHT EAFNRTSESQ 400
PERV-A    .......... .......... .......... .......... .......... 400
PERV-C    .......... .......... .......K.. .......... ....Q..... 379

PERV-1.15 YLVPGYDRWW ACNTGLTPCV STLVFNQTKD FCVMVQIVFR VYYYPEKAVL 450
PERV-A    .......... .......... .......... .......... .......... 450
PERV-C    .......... .......... .......... ..I....... .........I. 429

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PERV-A    .......... .......... .......... .......... .......... 500
PERV-C    ......NH.Q .......... .......... .........V. ......T... 479

PERV-1.15 NLHRIVTENL QALEKSVSNL EESLTSLSEV VLQNRRGLDL LFLKEGGLCV 550
PERV-A    ........D. .......... .......... .......... .......... 550
PERV-C    ........D. .......... .......... .......... .......... 529

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PERV-A    .......... .......... S........R. ...R.AD... .......... 600
PERV-C    .......... .......... .......... .......... .........L. 579

PERV-1.15 LATLLSALTG PLIVLLLLLT VGPCIINKLI APIRERISAV QIMVLRQQYQ 650
PERV-A    MT........ ..V..... .....L..RFV ..V...V... .......... 650
PERV-C    .......... .......... .......... .......... .......... 629

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PERV-A    GLL.QGETDL                                              660
PERV-C    .........                                               638
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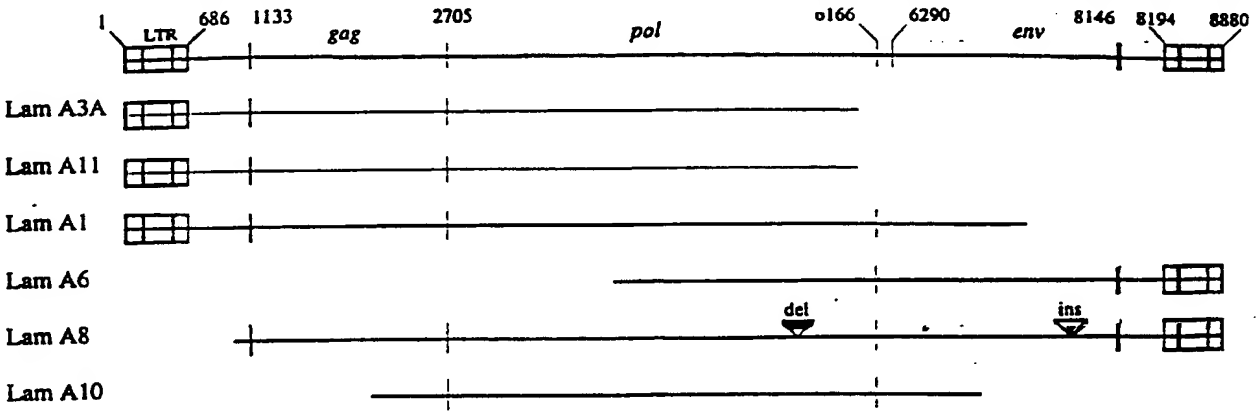
Fig. 6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LTR
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1133
gag
2705
pol
o166
6290
env
8146
8194
8880
Lam A3A
Lam A11
Lam A1
Lam A6
Lam A8
del
ins
Lam A10

Fig. 7

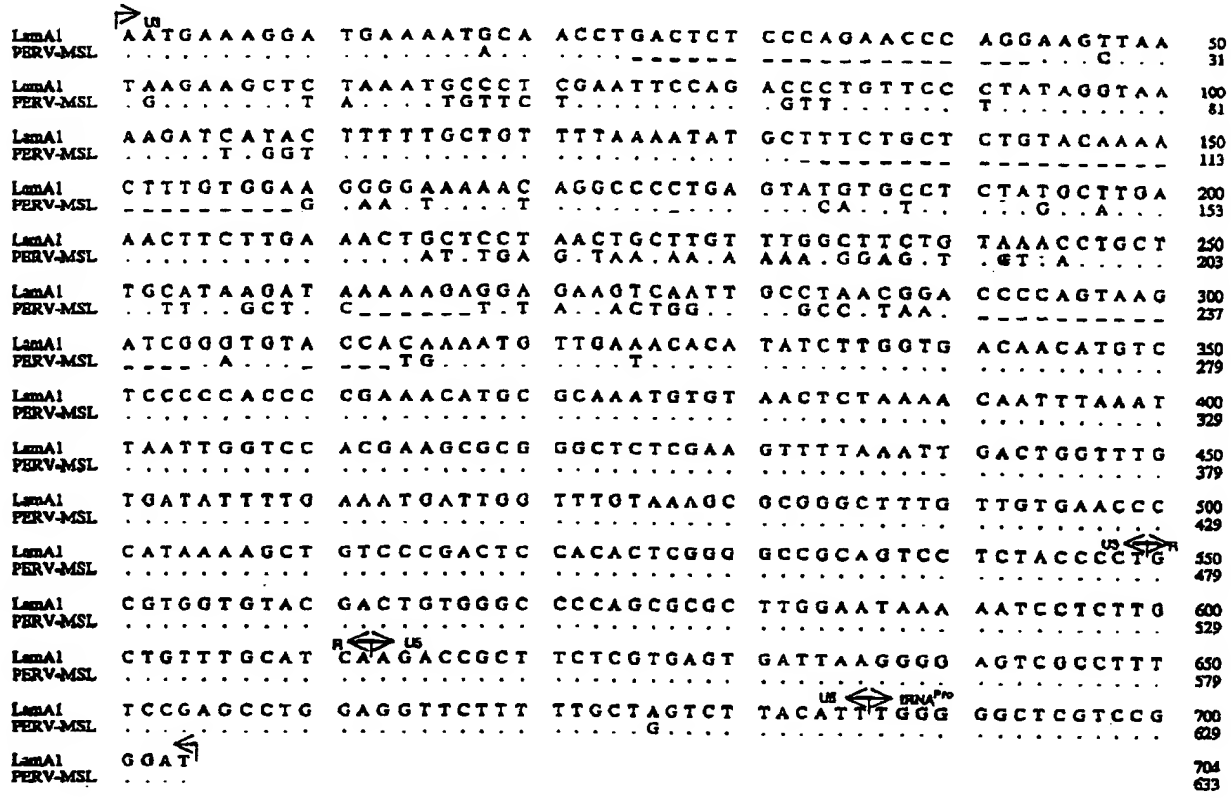
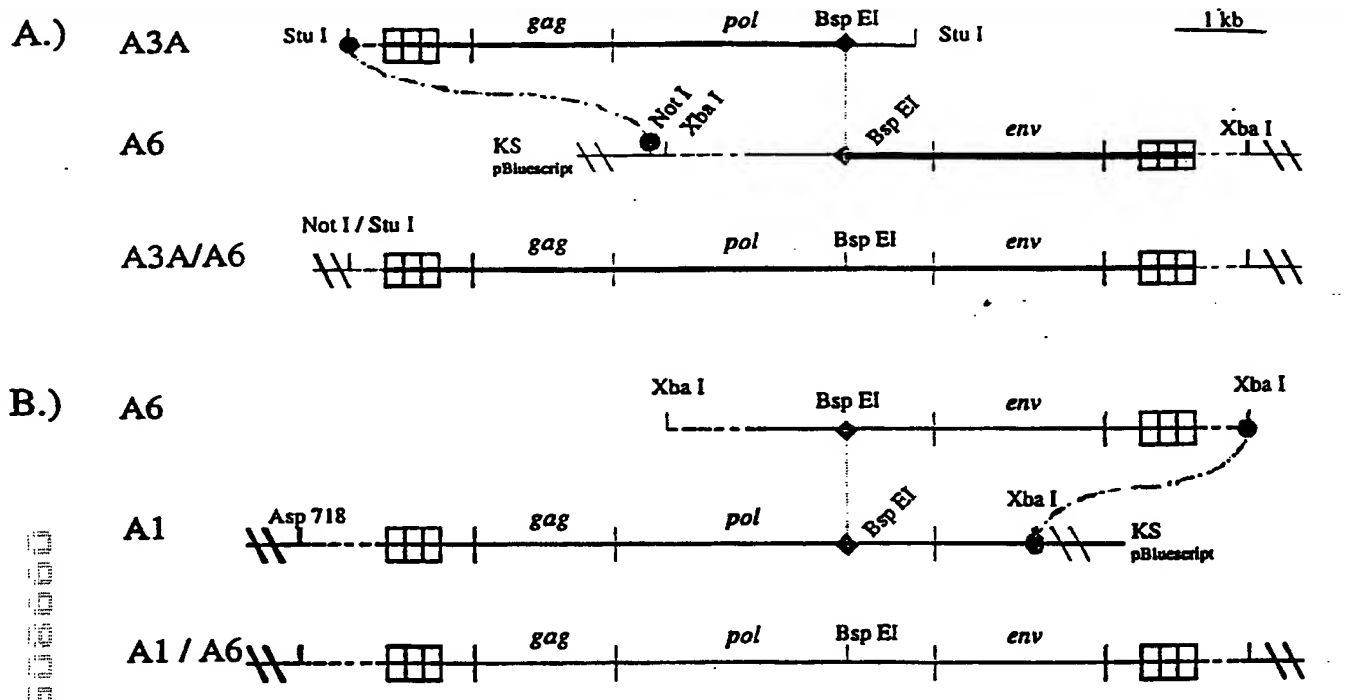


Fig. 8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A3A
Stu I
gag
pol
Bsp EI
Stu I
1 kb
A6
Not I
Xba I
KS
pBluescript
Bsp EI
env
Xba I
A3A/A6
Not I / Stu I
gag
pol
Bsp EI
env
B.)
A6
Xba I
Bsp EI
env
Xba I
A1
Asp 718
gag
pol
Bsp EI
Xba I
KS
pBluescript
A1 / A6
gag
pol
Bsp EI
env

Fig 9

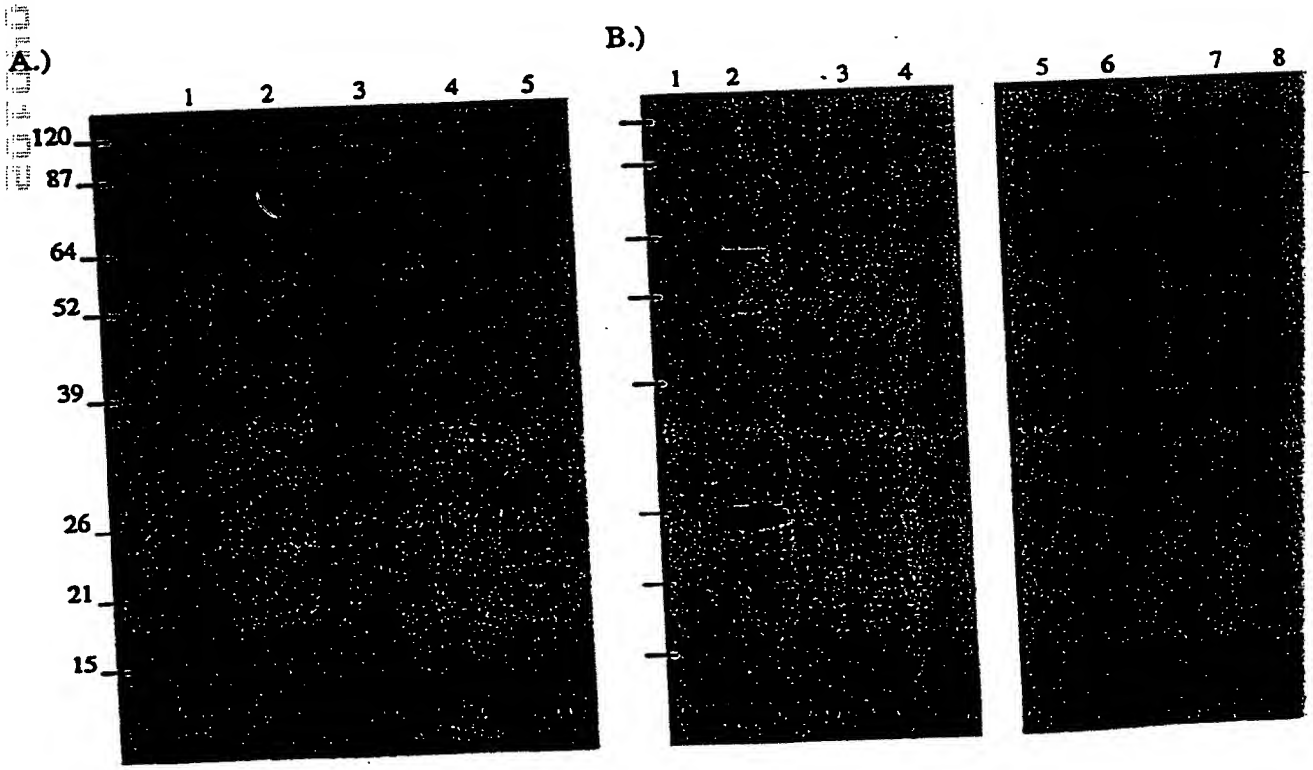
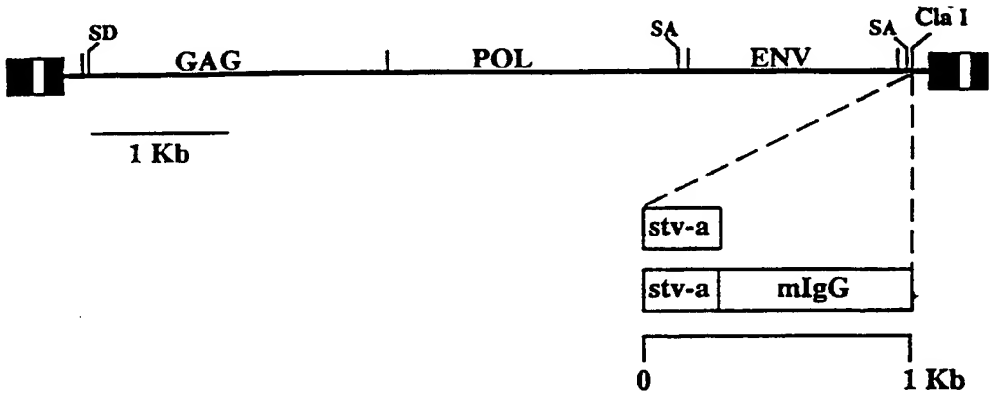

A.)
1 2 3 4 5
120
87
64
52
39
26
21
15
B.)
1 2 3 4
5 6 7 8

Fig. 10

REPLICATION COI ETENT VECTOR



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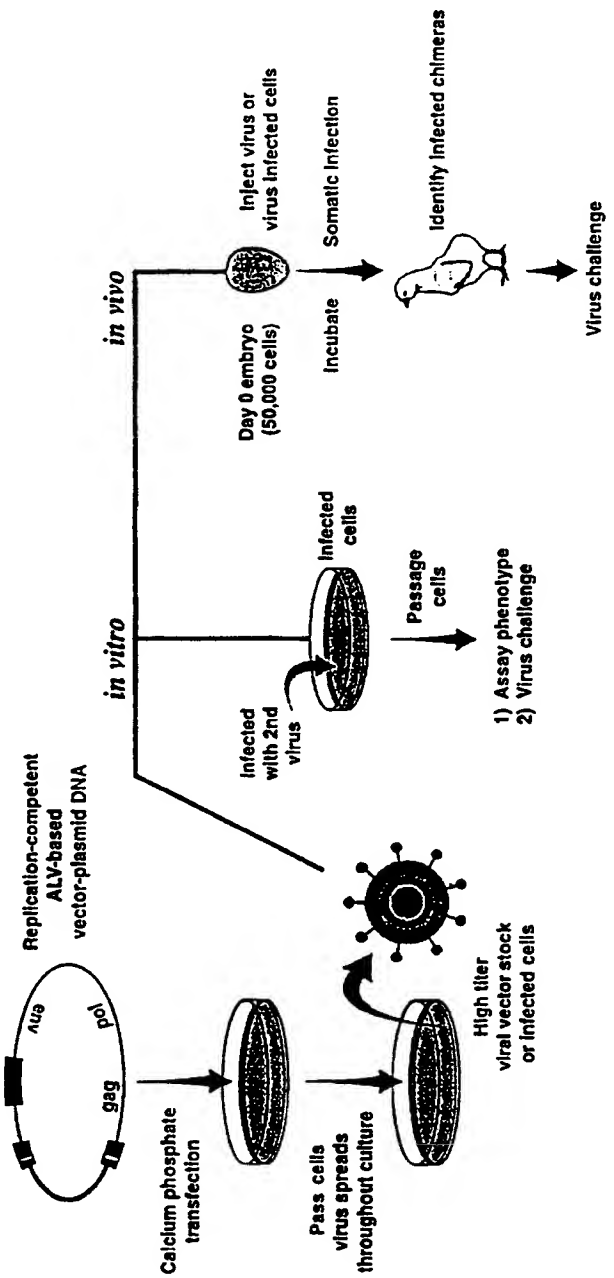
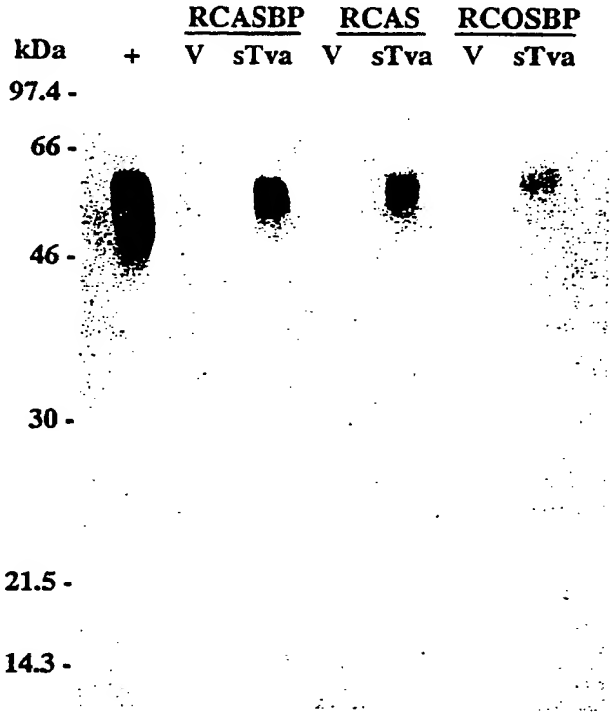

Replication-competent ALV-based vector-plasmid DNA
gag
pol
env
Calcium phosphate transfection
Pass cells virus spreads throughout culture
High titer viral vector stock or infected cells
in vitro
Infected with 2nd virus
Infected cells
Passage cells
1) Assay phenotype
2) Virus challenge
in vivo
Day 0 embryo (50,000 cells)
Inject virus or virus infected cells
Incubate
Somatic infection
Identify infected chimeras
Virus challenge

Figure 12



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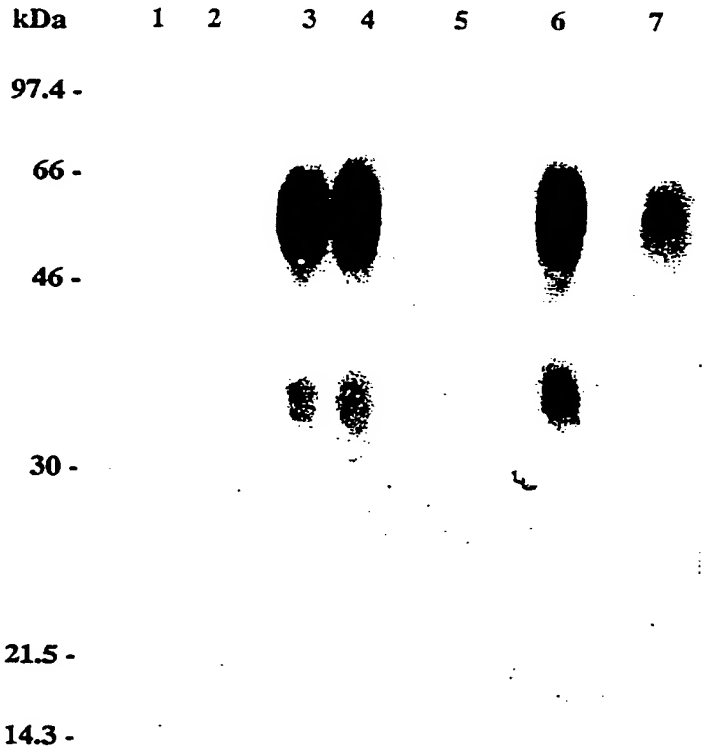
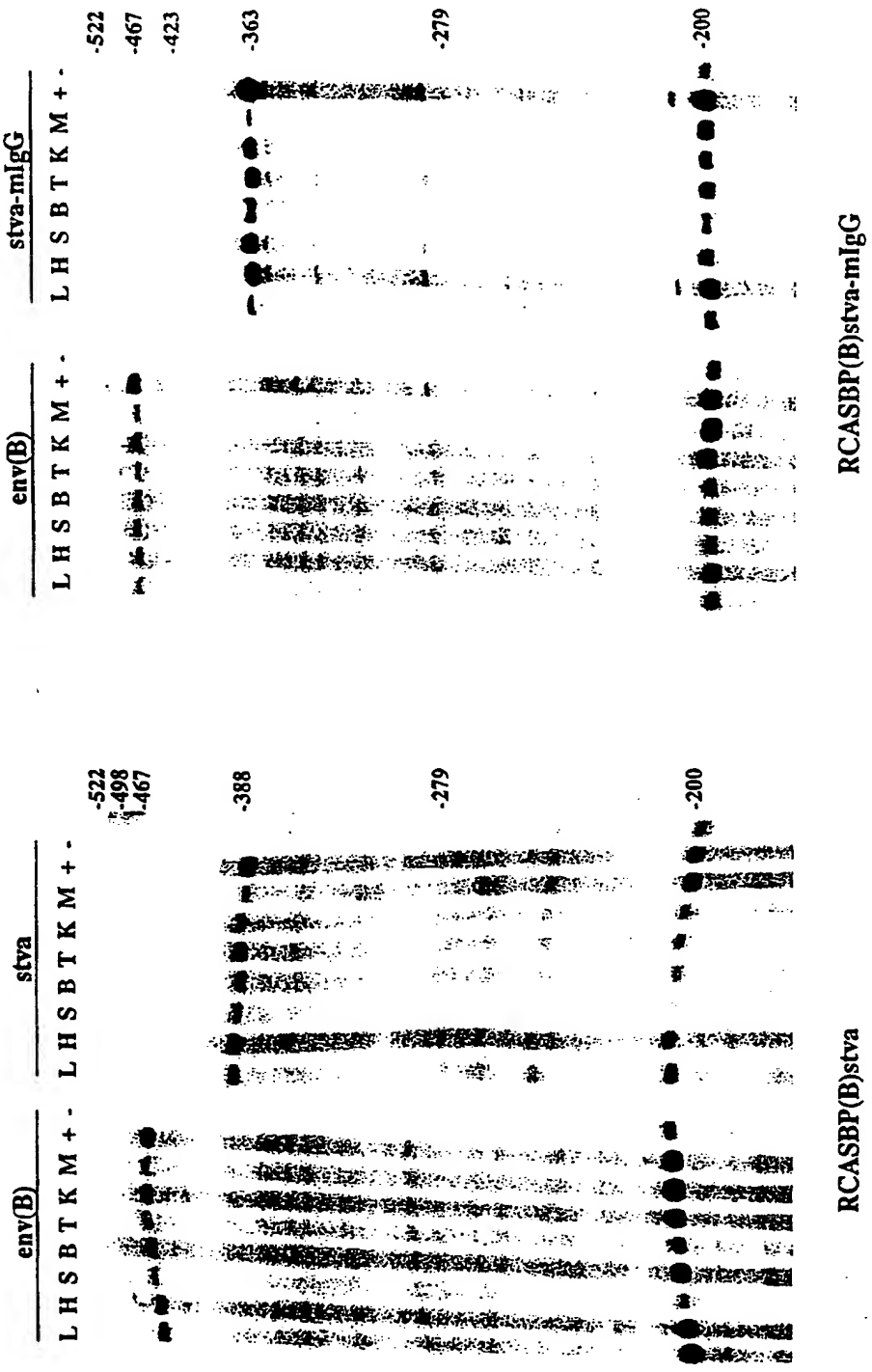


Figure 1a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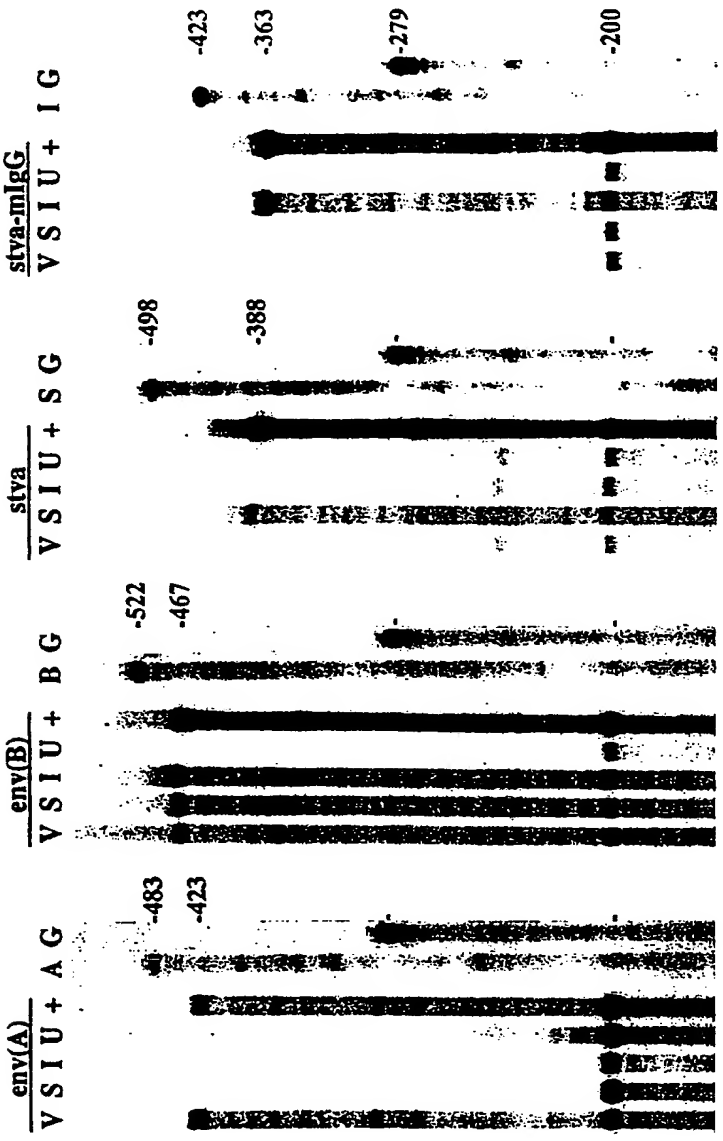
L H S B T K M + -
-522
-467
-423
-363
-279
-200
env(B)
L H S B T K M + -
RCASBP(B)stva-mIgG
stva
L H S B T K M + -
-522
-498
-467
-388
-279
-200
env(B)
L H S B T K M + -
RCASBP(B)stva

Figure 15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-363
-279
-200
stva-mIgG
V S I U + I G
-498
-388
stva
V S I U + S G
-522
-467
env(B)
V S I U + B G
-483
-423
env(A)
V S I U + A G

FIGURE 16

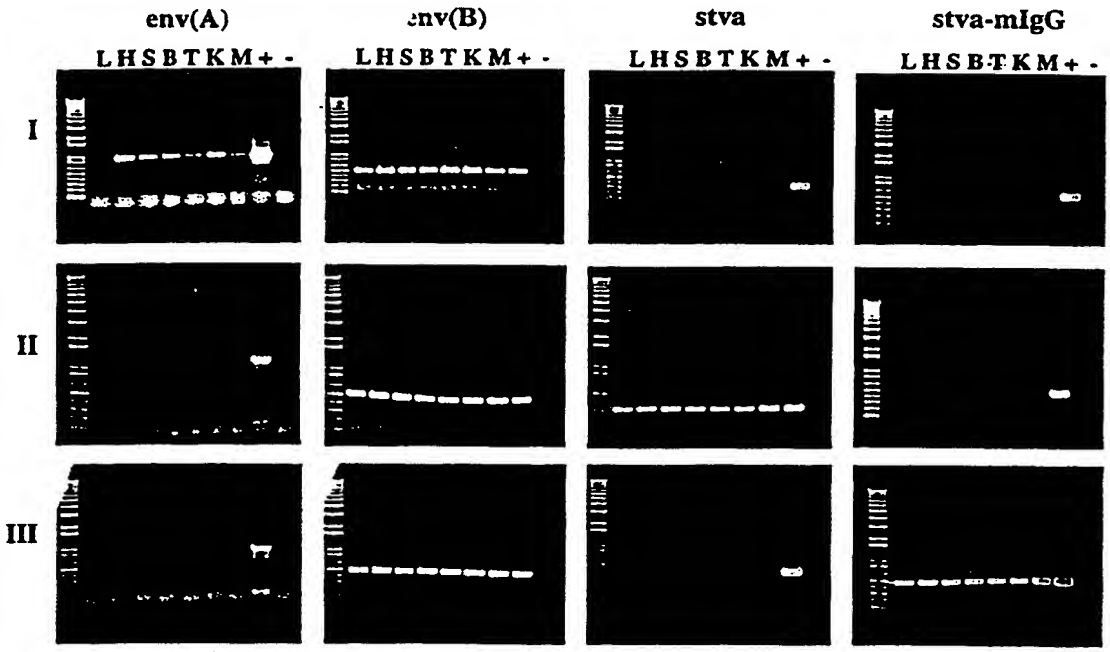

FIGURE 17

Figure 18

PERV 1.15

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